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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/689,525	10/21/2003	Shuji Kurokawa	032036	8632

38834 7590 10/19/2006

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EXAMINER

AKANBI, ISIAKA O

ART UNIT PAPER NUMBER

2877

DATE MAILED: 10/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/689,525

Applicant(s)

KUROKAWA, SHUJI

Examiner

Isiaka O. Akanbi

Art Unit

2877

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 18 August 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 5 is/are allowed.
- 6) ☒ Claim(s) 1-4 and 6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 18 August 2006.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after allowance or after an Office action under *Ex Parte Quayle*, 25 USPQ 74, 453 O.G. 213 (Comm'r Pat. 1935). Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, prosecution in this application has been reopened pursuant to 37 CFR 1.114. Applicant's submission filed on 18 August 2006 has been entered.

### ***Information Disclosure Statement***

The information disclosure statement file 18 August 2006 has been entered and references considered by the examiner.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 3, 4/3, and 6/3 is rejected under 35 U.S.C. 112, second paragraph, as recite "wherein said light emitting element is formed out of said receiving member [[of]] as a glass-like scatterer", is unclear in view of figs. 1 and 3, as to how the recite statement meet the claim structure.

Claims 4/3 and 6/3 are rejected for being dependent upon a rejected base claim.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and

the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2, 4/1, 4/2, 6/1, 6/2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aoyama et al. (5,194,743) in view Hattori et al. (5,361,121)

Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Aoyama in view of Hattori. The reference of Aoyama teaches of an alignment apparatus for aligning the central position and an orientation mark of a generally plate-like work with a predetermined position, comprising a table (102)(fig. 17), which is provided rotatably in a plane and equipped with a loading plane having suction holes (102) for said work, a shift mechanism (100/101/105107) for shifting the table, and a sensor (111), which is disposed adjacent to the outer edge portion of said work, for detecting the position of the outer edge and outputting detected positional data for shifting said table to a predetermined position, wherein said loading plane is formed into a size so as to be positioned inside the periphery of said work (102). Aoyama's prior art embodiment of Fig. 17 is silent regarding a receiving member being provided outside said table and being positioned on the generally same plane as said loading plane and the periphery of the receiving member has a plane configuration so as to come to a position further outside the periphery of the work. However, he does mention the use of edge exposure with the prior art embodiments (col. 2, lines 40-50). In addition, Hattori in a periphery exposing method and apparatus teaches using a receiving member being provided outside said table and being positioned on the generally same plane as said loading plane and the periphery of the receiving member has a plane configuration so as to come to a position further outside the periphery of the work (Fig. 1: 9). Therefore, it would be obvious to one of ordinary skill in the art at the time the invention was made to have a receiving member being provided outside said table and being positioned on the generally same plane as said loading plane and the periphery of the receiving member has a plane configuration so as to come to a position further outside the periphery of the work in order to provide a reference signal for accurate edge exposure.

In addition, Examiner would like to mention that even though Aoyama's Fig. 17 is silent concerning a receiving member that Aoyama's Fig. 1 embodiment does disclose a receiving member, a fork (Fig. 1: 29, 30).

As to claim 2, Aoyama and Hattori disclose everything claimed, as applied to claim 1 above, the reference of Aoyama teaches a light receiving element (111) and a light emitting element (108)(fig.17), however (fig. 17) is silent regarding disposed so as to optically sandwich the periphery portion of the work, The reference of Aoyama discloses in another embodiment (fig. 2) a light receiving element (23) and a light emitting element (21) disposed so as to optically sandwich the periphery portion of the work. Therefore it would have been obvious to one having ordinary skill in the art at the time of invention to have a light receiving element and a light-emitting element (21) optically sandwiching the periphery portion of the work for the purpose of compactness and economic benefit from using less components. Further Hattori teaches that the light receiving member is translucent (9)(fig. 1).

As to claim 3, Aoyama and Hattori disclose everything claimed, as applied to claim 2 above, the reference of Aoyama teaches a light receiving element (111) and a light emitting element (108)(fig.17), however (fig. 17) is silent regarding disposed so as to optically sandwich the periphery portion of the work, The reference of Aoyama discloses in another embodiment (fig. 2) a light receiving element (23) and a light emitting element (21) disposed so as to optically sandwich the periphery portion of the work. Therefore it would have been obvious to one having ordinary skill in the art at the time of invention to have a light receiving element and a light-emitting element (21) optically sandwiching the periphery portion of the work for the purpose of compactness and economic benefit from using less components. Further Hattori teaches that the light receiving member is translucent (9)(fig. 1).

As to claim 6, Aoyama and Hattori disclose everything claimed, as applied to claim 1 above, in addition Aoyama discloses wherein said work comprising an ultra thin semiconductor wafer (col. 1, line 10-15).

### ***Allowable Subject Matter***

Claim 5 is allowable

As to claim 5, the prior art of record, taken alone or in combination, fails to disclose or render obvious said table is formed out of material having translucency, and is formed into a size so that the periphery edge thereof comes to position further outside the periphery of said work, in combination with the rest of the limitations of the claim.

As to claims 3, 4/3, and 6/3, the examiner has not indicated any allowable subject matter due to the indefinite nature of the claims as mentioned in the rejection under 35 U.S.C. 112, Second paragraph above.

### **Additional Prior Art**

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The references listed in the attached form PTO-892 teach of other prior art alignment apparatus for aligning the central position and an orientation mark of a generally plate-like work with a predetermined position that may anticipate or obviate the claims of the applicant's invention.

### **Conclusion**

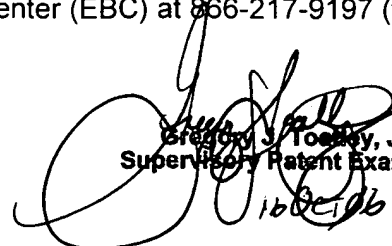
### **Fax/Telephone Information**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Isiaka Akanbi whose telephone number is (571) 272-8658. The examiner can normally be reached on 8:00 a.m. - 4:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory J. Toatley Jr. can be reached on (571) 272-2800 ext. 77. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Isiaka Akanbi  
October 14, 2006

  
Gregory J. Toatley, Jr.  
Supervisory Patent Examiner  
16 OCT 06